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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/177,815	10/23/1998	KYOUNG-SU KIM	1363.1004/MD	3622

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STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

BROWN, RUEBEN M

ART UNIT PAPER NUMBER

2611

DATE MAILED: 12/12/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/177,815

Applicant(s)

KIM ET AL.

Examiner

Reuben M. Brown

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 22 September 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
2. ☒ The proposed amendment(s) will not be entered because:  
(a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ they raise the issue of new matter (see Note below);  
(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See enclosed Advisory Action.  
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1-20

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.  
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.  
10. ☐ Other: \_\_\_\_\_



ANDREW FAILE  
SUPERVISORY PATENT EXAMINER

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Continuation of 2. NOTE: Applicant's proposed amendments to claim 1, requiring, "encoding the MPEG processed video signal separated from the digital signal, transmitting the additional information overlapped with the MPEG processed video signal separated from the digital broadcast signal in accordance with the encoding selected in the encoding of the MPEG processed video signal, and transmitting the MPEG processed audio signal separated from the digital broadcasting signal, raises new issues which would require further search and/or consideration.

## **ADVISORY ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 9/22/2003 have been fully considered but they are not persuasive. Applicant argues on page 10 that, "there is no teaching or suggestion in Bestler of separating "an analog broadcasting signal into a synchronous signal, an analog video signal and an analog audio signal", as recited in claim 11. Examiner respectfully disagrees. In the previous Office Action, examiner pointed out at least one passage in Bestler that discusses the operation of the NTSC demodulator 28, i.e. col. 3, lines 16-15.

However, in col. 2, lines 10-15 & col. 2, lines 48-51, the NTSC demodulator 28 is also discussed. In the above passages it is disclosed that the NTSC demodulator 28 provides a "baseband composite video and audio outputs". Thus in Bestler, it is clear that the NTSC demodulator 28 separates a received TV signal into an analog video signal and an analog audio signal, as recited in the claim. Apparently, the only issue remaining is the claimed "synchronous signal".

In the previous Office Action, it was stated that the extracted composite video signal inherently includes a numerous synchronous signals, such as horizontal and vertical sync signals. Applicant appears not to agree with this assertion made by the examiner. Thus applicant is directed to the definition of a composite video signal, supplied by the reference book BASIC

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TELEVISION, Principles and Services. This publication has already been provided in the Office Action mailed 1/16/2003, but is submitted again for applicant's convenience.

On page 64 of the reference, it is disclosed, "The composite video signal contains all information needed to reproduce the picture. This includes (1) camera signal corresponding to the desired picture information, (2) synchronizing pulses to synchronize the transmitter and receiver scanning, and (3) blanking pulses to obliterate the retraces produced in scanning and to ensure that there is no camera signal to interfere with the synchronization".

Therefore examiner respectfully disagrees with applicant's position that Bestler does not teach separating the broadcasting signal into a synchronous signal, since by definition the composite signal (i.e., inherently) contains several synchronous signals.

Applicant also argues on page 12 that "nothing in Bestler teaches or suggests synchronize phases of the digital and analog broadcasting signals upon tuning unit changing selection between the digital or analog broadcasting signal". It is further argued, "Bestler is silent as to recognizing that upon the tuning unit changing selection between the digital or analog broadcasting signal, the phases of the signals are synchronized". Again examiner respectfully disagrees with applicant's characterization of the reference.

First of all, examiner directs applicant to col. 1, lines 20-44 & col. 1, lines 54-63, which discuss that Bestler is directed to solving problems related to the integration of an analog

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receiver with a digital receiver. Analog video signals, i.e. standard NTSC TV signals are well known to be synchronized by vertical sync signals, which synchronize the beginning of each field within a frame of video and the horizontal sync signals, which synchronize the beginning of each of the 525 lines of the combined odd & even fields of each particular frame. However, digital video signals, for instance MPEG video signals are rendered differently from NTSC analog video signals. In particular digital video do not have the odd & even fields, they are rendered using a progressive scan, as opposed to the interlaced scan of the analog video signal.

When switching between the analog and digital video signals, Bestler teaches that either the digital or analog signals, or both are scan converted to a desired display format, col. 4, lines 1-10. Therefore, at the very least, since each line of analog or digital video includes the color burst sync signal, the synchronization of phases of the analog and digital broadcast signals takes place in Bestler, in order for each of the digital and analog signals to be properly displayed on the display format of the display screen. It is discussed that the scan converters are well known in the art and may be used to increase the perceived resolution of the displayed signal or to convert from a non-standard to standard display format.

As an example of such a well-known scan converter, examiner provides Kitou, U.S. Pat 3 6,404,459, for teaching generic features of a scan converter. For example, Kitou discloses that the scan converter is used for converting disparate video signals of various frequencies to the proper display format of the receiver; see col. 1, lines 19-64 & col. 2, lines 8-26 &, including the

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appropriate resolution, col. 2, lines 61-67, which also the purpose of the scan converter of the principle reference Bestler.

In doing so, Kitou uses a phase-locked loop that ensures that the video signals are read in phase with the appropriate clock signal generated by the PLL. Thus examiner contends that at the time the invention was made, it was known to operate a scan converter using such a PLL, which reads on the claimed subject matter.

In light of the above arguments, examiner maintains the rejection of record, mailed in the previous Office Action.

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**Any response to this action should be mailed to:**

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**or faxed to:**

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**Or:**

(703) 746-6861 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")


*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).*

Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to Reuben M. Brown whose telephone number is (703) 305-2399.  
The examiner can normally be reached on M-F (8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
supervisor, Andrew I. Faile can be reached on (703) 305-4380. The fax phone numbers for the  
organization where this application or proceeding is assigned is (703) 872-9306 for regular  
communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the receptionist whose telephone number is (703) 305-4700.

Reuben M. Brown

  
ANDREW FAILE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600